THE ASTROPHYSICAL JOURNAL

Founded in 1895 by George E. Hale and James E. Keeler

HELMUT A. ABT
Editor-in-Chief
Kitt Peak National Observatory

A. DALGARNO
Letters Editor
Center for Astrophysics

EUGENE H. AVRETT
Deputy Letters Editor
Center for Astrophysics

F. DAVID A. HARTWICK
Associate Letters Editor
University of Victoria

MICHAEL JURA
Associate Letters Editor
University of California, Los Angeles

EDWIN E. SALPETER
Associate Letters Editor
Cornell University

AAS PUBLICATIONS BOARD

ROBERT J. HANISCH (1996–1999), *Chairperson*
Space Telescope Science Institute

JAMES J. CONDON (1994–1997)
NRAO, Charlottesville, Virginia

JOHN A. NOUSEK (1994–1997)
Pennsylvania State University

MOSHE ELITZUR (1995–1998)
University of Kentucky

DIMITRI M. MIHALAS (1996–1999)
University of Illinois

KAREN S. BJORKMAN (1996–1999)
University of Toledo

SUSAN TEREBEY (1997–2000)
California Institute of Technology

Publication Manager: JULIE STEFFEN

Production Manager: KIM LANGFORD

Chief Manuscript Editor: GERALDINE BRADY

Manuscript Editors: WALTER G. GLASCOFF III, BETH GARRISON, THAD A. DORIA, GREG M. HAJEK, PAUL RUICH, KENNETH HITE, IVAN BRUNETTI, SHARON JENNINGS, DAVID KIELPINSKI, AND MAUREEN E. CALLAHAN

Electronic Publishing Coordinators: SARA ZIMMERMAN AND JOHN MYER

Production Staff: CINDY GARRETT, CAROLYN B. CHMIEL, EMILY CLARK, SUCHITRA GURURAJ, AND ELISSA PARK

Cambridge Editorial Office: MARY BURGESS, MARY GUILLEMETTE, CELINA AZEVEDO, AND JON KIM-REUTER

VOLUME 483, PART 2
1997 JULY 1 AND JULY 10

PUBLISHED BY THE UNIVERSITY OF CHICAGO PRESS FOR
THE AMERICAN ASTRONOMICAL SOCIETY

© 1997 BY THE AMERICAN ASTRONOMICAL SOCIETY. ALL RIGHTS RESERVED.
PUBLISHED THREE TIMES A MONTH

COMPOSED BY CADMUS JOURNAL SERVICES, RICHMOND, VIRGINIA, U.S.A.

PRINTED BY CAPITAL CITY PRESS, INC., MONTPELIER, VERMONT, U.S.A.

THE ASTROPHYSICAL JOURNAL LETTERS

CONTENTS OF VOLUME 483, PART 2

1997 July 1, Number 1

	Page
AN ISOCURVATURE MODEL FOR EARLY GALAXY ASSEMBLY *P. J. E. Peebles*	L1
Lyα CLOUDS ASSOCIATED WITH POPULATION III OBJECTS IN COLD DARK MATTER MODELS *Benedetta Ciardi & Andrea Ferrara*	L5
EVIDENCE FOR ORDERED MAGNETIC FIELDS IN THE QUASAR ENVIRONMENT *P. S. Udomprasert, G. B. Taylor, T. J. Pearson, & D. H. Roberts*	L9
SIGNATURES OF ACCRETION DISKS IN QUASAR MICROLENSING *Andrew Gould & Jordi Miralda-Escudé*	L13
ABELL 2218: X-RAY LENSING, MERGER, OR BOTH? *Maxim Markevitch*	L17
A MASSIVE CLUSTER OF GALAXIES AT $z = 0.996$ *J.-M. Deltorn, O. Le Fèvre, David Crampton, & M. Dickinson*	L21
COSMOLOGICAL TIME DILATION IN SHORT GAMMA-RAY BURSTS *H. Che, Y. Yang, M. Wu, & Q. B. Li*	L25
SUPERNOVAE AND THEIR HOST GALAXIES *Lifan Wang, Peter Höflich, & J. Craig Wheeler*	L29
THE NUCLEAR IONIZED GAS IN THE RADIO GALAXY M84 (NGC 4374) *Gary A. Bower, Timothy M. Heckman, Andrew S. Wilson, & Douglas O. Richstone*	L33
THE DISTANCE TO THE COMA CLUSTER FROM SURFACE BRIGHTNESS FLUCTUATIONS *Bjarne Thomsen, William A. Baum, Mark Hammergren, & Guy Worthey*	L37
THE AGE OF THE LARGE MAGELLANIC CLOUD CLUSTER NGC 1651 *Jeremy R. Mould, Mingsheng Han, Peter B. Stetson, Brad Gibson, John A. Graham, John Huchra, Barry Madore, & Daya Rawson*	L41
THREE-DIMENSIONAL MAGNETOHYDRODYNAMIC SIMULATIONS OF RELATIVISTIC JETS INJECTED ALONG A MAGNETIC FIELD *Ken-Ichi Nishikawa, Shinji Koide, Jun-ichi Sakai, Dimitris M. Christodoulou, Hélène Sol, & Robert L. Mutel*	L45
AN OUTBURST OF GeV GAMMA-RAY EMISSION FROM CENTAURUS X-3 *W. Thomas Vestrand, P. Sreekumar, & Masaki Mori*	L49
SIZE OF THE VELA PULSAR'S RADIO EMISSION REGION: 500 KILOMETERS *C. R. Gwinn, M. J. Ojeda, M. C. Britton, J. E. Reynolds, D. L. Jauncey, E. A. King, P. M. McCulloch, J. E. J. Lovell, C. S. Flanagan, D. P. Smits, R. A. Preston, & D. L. Jones*	L53
A MOLECULAR DISK AROUND THE EPISODIC JETS IN KjPn 8 *P. J. Huggins, R. Bachiller, P. Cox, & T. Forveille*	L57
DETECTION OF $HC_{11}N$ IN THE COLD DUST CLOUD TMC-1 *M. B. Bell, P. A. Feldman, M. J. Travers, M. C. McCarthy, C. A. Gottlieb, & P. Thaddeus*	L61
DISCOVERY OF FAR-INFRARED PURE ROTATIONAL TRANSITIONS OF CH^+ IN NGC 7027 *J. Cernicharo, X.-W. Liu, E. González-Alfonso, P. Cox, M. J. Barlow, T. Lim, & B. M. Swinyard*	L65
CONSTRAINTS ON THE NUCLEUS AND DUST PROPERTIES FROM MID-INFRARED IMAGING OF COMET HYAKUTAKE *J. Sarmecanic, M. Fomenkova, B. Jones, & T. Lavezzi*	L69

CONTENTS

	Page
ERRATUM ESCAPING RADIO EMISSION FROM PULSARS: POSSIBLE ROLE OF VELOCITY SHEAR *Swadesh M. Mahajan, George Z. Machabeli, & Andria D. Rogava*	L73
INSTRUCTIONS TO AUTHORS OF LETTERS, AND RECENT LETTERS ABSTRACTS AND OTHER BIBLIOGRAPHICAL SERVICES	*Inside Back Cover*
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	*Back Cover*

1997 July 10, Number 2

	Page
EVOLUTION OF THE LUMINOSITY DENSITY IN THE UNIVERSE: IMPLICATIONS FOR THE NONZERO COSMOLOGICAL CONSTANT *T. Totani, Y. Yoshii, & K. Sato*	L75
IMPROVED PARAMETERS AND NEW LENSED FEATURES FOR Q0957+561 FROM WFPC2 IMAGING *Gary Bernstein, Philippe Fischer, J. Anthony Tyson, & George Rhee*	L79
ARE GAMMA-RAY BURSTS INDEED CORRELATED WITH ABELL CLUSTERS OF GALAXIES? *Javier Gorosabel & Alberto J. Castro-Tirado*	L83
X-RAY AFTERGLOWS FROM GAMMA-RAY BURSTS *M. Tavani*	L87
RADIO MONITORING OF THE 1997 JANUARY 11 GAMMA-RAY BURST *D. A. Frail, S. R. Kulkarni, E. Costa, F. Frontera, J. Heise, M. Feroci, L. Piro, D. Dal Fiume, L. Nicastro, E. Palazzi, & R. Jager*	L91
OSSE OBSERVATIONS OF THE SOFT GAMMA-RAY CONTINUUM FROM THE GALACTIC PLANE AT LONGITUDE 95° *J. G. Skibo, W. N. Johnson, J. D. Kurfess, R. L. Kinzer, G. Jung, J. E. Grove, W. R. Purcell, M. P. Ulmer, N. Gehrels, & J. Tueller*	L95
EVIDENCE OF TWO KINEMATICALLY DIFFERENT STELLAR SYSTEMS IN NGC 1068 *B. García-Lorenzo, E. Mediavilla, S. Arribas, & C. del Burgo*	L99
Lyα CONSTRAINTS ON THE NATURE OF THE X-RAY–ABSORBING MEDIUM IN COOLING FLOW CLUSTERS *Ari Laor*	L103
NEBULAR SPECTRA OF TYPE Ia SUPERNOVAE *Weihong Liu, D. J. Jeffery, & D. R. Schultz*	L107
A PLANET ORBITING THE STAR RHO CORONAE BOREALIS *Robert W. Noyes, Saurabh Jha, Sylvain G. Korzennik, Martin Krockenberger, Peter Nisenson, Timothy M. Brown, Edward J. Kennelly, & Scott D. Horner*	L111
DISCOVERY OF MICROSECOND TIME LAGS IN KILOHERTZ QPOs *B. A. Vaughan, M. van der Klis, M. Méndez, J. van Paradijs, R. A. D. Wijnands, W. H. G. Lewin, F. K. Lamb, D. Psaltis, E. Kuulkers, & T. Oosterbroek*	L115
DISCOVERY OF KILOHERTZ QUASI-PERIODIC OSCILLATIONS FROM 4U 1820−303 WITH *ROSSI X-RAY TIMING EXPLORER* *Alan P. Smale, William Zhang, & Nicholas E. White*	L119
A DRIVING MECHANISM FOR THE NEWLY DISCOVERED CLASS OF PULSATING SUBDWARF B STARS *S. Charpinet, G. Fontaine, P. Brassard, P. Chayer, F. J. Rogers, C. A. Iglesias, & B. Dorman*	L123
DG TAURI B: THE INTERACTION OF AN ATOMIC JET WITH AMBIENT MOLECULAR GAS *George F. Mitchell, Anneila I. Sargent, & Vincent Mannings*	L127
EFFICIENCY OF MOLECULAR HYDROGEN FORMATION ON SILICATES *Valerio Pirronello, Ofer Biham, Chi Liu, Lyong Shen, & Gianfranco Vidali*	L131
LABORATORY DETECTION OF THE RING-CHAIN MOLECULE C_5H_2 *M. J. Travers, M. C. McCarthy, C. A. Gottlieb, & P. Thaddeus*	L135
LABORATORY DETECTION OF THE RING-CHAIN MOLECULE C_7H_2 *M. C. McCarthy, M. J. Travers, C. A. Gottlieb & P. Thaddeus*	L139
INSTRUCTIONS TO AUTHORS OF LETTERS, AND RECENT LETTERS ABSTRACTS AND OTHER BIBLIOGRAPHICAL SERVICES	*Inside Back Cover*
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	*Back Cover*